

PATENT CLAIMS

1. Crop protection composition, formulated as powder, granules or water-based, of active compounds having foliar or systemic action, characterized in that it comprises, in the case of herbicide preparations, at least one herbicide from the groups of the urea derivatives or sulphonylureas, the carbamates, biscarbamates, diphenyl ethers, pyridolylacetic acid derivatives, pyridazines, triazines, triazinones, uracils, benzofuran derivatives, glyphosate or glufosinate, in the case of fungicide preparations, at least one fungicide from the group of the morpholines, azoles, phthalimides or piperidines, in the case of insecticide preparations, at least one insecticide from the group of the pyrethroids, carbamates or organophosphates, or possible salts or esters of the abovementioned groups of active compounds, at least one inorganic adsorbent and at least one surfactant, preferably from the group of the ethoxylated C₆- to C₂₀-alcohols, preferably C₈- to C₁₆-alcohols, the ethoxylated castor oils or the alkyl ether sulphates.

2. Crop protection composition according to Claim 1, characterized in that the inorganic adsorbent is selected from the silicic acids, the aluminosilicates and/or the aluminium oxides.

3. Crop protection composition according to ^{Claim 1} ~~any of Claims 1 or 2~~, characterized in that the inorganic adsorbent is colloidal silicic acid (silica gel) and/or pyrogenic silicic acid (Aerosil).

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4. Crop protection composition according to ^{Claim 1} ~~any of Claims 1 to 3~~, characterized in that the surfactant is selected from the tridecanols having from 5 to 13 ethoxy units, from the sodium, potassium or ammonium fatty alcohol dialkylglycol ether sulphates, from ethoxylated castor oil or from mixtures of these surfactants.

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5. Crop protection composition according to ^{Claim 1} ~~any of Claims 1 to 4~~, characterized in that the surfactant is selected from Volpo T/785, Volpo T/10, Emulsogen or Genapol LRO or mixtures of these surfactants.

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6. Crop protection composition according to ^{Claim 1} ~~any of Claims 1 to 5~~, characterized in that, in the case of the herbicidal preparations, the active compound is selected from phenmedipham, desmedipham, metamitron, ethofumesate, or mixtures of these active compounds.

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7. Crop protection composition according to ^{Claim 1} ~~any of Claims 1 to 6~~, characterized in that it additionally comprises customary auxiliaries and/or carriers, for example antifreeze agents, stabilizers, antifoams and/or wetting agents and dispersants and also carriers, in customary proportions.

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8. Crop protection composition according to ^{Claim 1} ~~any of Claims 1 to 7~~, characterized in that the wetting agent and dispersant are selected from the phosphated di- or tristyrenes and lignin sulphonates, preferably from the ethoxylated trisstyrenephenol phosphates, or the sodium, potassium, calcium, magnesium, zinc or ammonium lignin sulphonates, in particular from the mixed calcium/magnesium/zinc lignin sulphonate salts, or mixtures of these agents.

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a a 9. Crop protection composition according to ^{Claim 1} ~~any of~~ ~~Claims 1 to 8~~, characterized in that the wetting agent and dispersant are selected from Tensiofix LX Special, Soprophor FL, Soprophor FL 60, Hoechst LFS or mixtures of these agents. N

a a 10. Crop protection composition according to ^{Claim 1} ~~any of~~ ~~Claims 1 to 9~~, characterized in that the proportion of inorganic adsorbent is from 0.5 to 25.0% by weight, preferably from 2.0 to 15.0% by weight, the proportion of surfactants is from 5.0 to 40.0% by weight, preferably from 7 to 35% by weight, particularly preferably between 10.0 and 25% by weight, and the proportion of active compound(s) is from 5.0 to 75.0% by weight, preferably from 15.0 to 55.0% by weight.

a a 11. Crop protection composition according to ^{Claim 1} ~~any of~~ ~~Claims 1 to 10~~, characterized in that the silica gel has an SiO₂ content of at least 95% and a specific surface area of from 100 to 700 m²/g, preferably of from 130 to 250 m²/g.

a 12. Process for preparing a crop protection composition according to ^{Claim 1} ~~any of~~ ~~Claims 1 to 11~~, characterized in that the components are finely ground in a suitable apparatus and mixed with the required amount of surfactants and adsorbent.

13. Process for preparing a crop protection composition according to Claim 12, characterized in that the components are adjusted to a degree of fineness of from 0.5 to 20 μ m, preferably < 10 μ m.